Operational Considerations

Caution: The degassing tubing in the Vacuum Degasser is manufactured from Teflon AF®. Teflon AF® is inert to all solvents normally used in HPLC, however, it is soluble in perfluorinated solvents such as Fluorinert® FC-75 and FC-40 and Fomblin perfluoro polyether solvents from Ausimont. In addition, Freon® solvents will adversely affect Teflon AF®. Use of such solvents in the Vacuum Degasser will result in the dissolution and hence destruction of the tubing.

Note: All parts that contact the mobile phase are made of PEEK, Kel-F®, Tefzel® or Teflon AF®. PEEK is sensitive to Sulfuric acid and certain solvents.

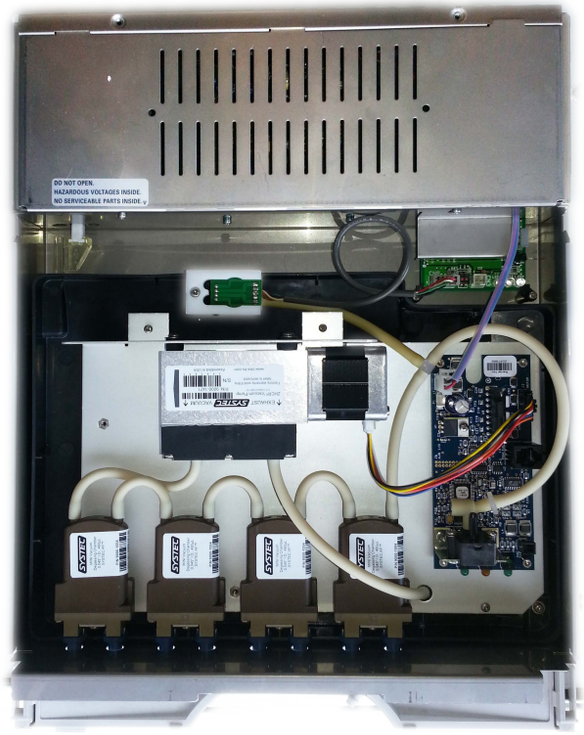
When the degasser is used, check for leaks around the ¼-28 connectors. If a leak occurs at a connector, tighten the fitting an additional 1/8 turn. If the leak persists, disconnect the leaking fitting and inspect it. If the nut and ferrule appear to be in good condition, reconnect the fitting. If the leak persists, replace the nut and ferrule and repeat the procedure until you achieve leak-free operation.

Note: The plastic connectors should be tightened by hand. Do not overtighten the fittings as that will damage the threads.

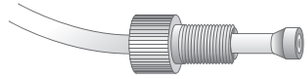
Caution: Damage caused by precipitating buffer salts in capillary tubing, or damage resulting from improper flushing, is specifically excluded from warranty.

For instructions on how to flush the degasser during shutdown, please refer to the "Shutdown" chapter in the Installation Manual.

1100 Degasser Retrofit Kit General Information and Precautions



Making a tubing connection

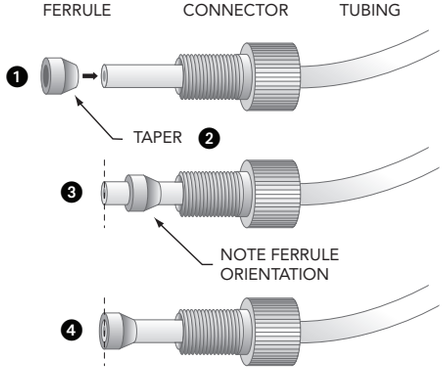


Tubing and fluidics precautions

This Information sheet contains general information and precaution information. For installation instructions please refer to the "Installation Instructions Manual"

To make a tubing connection:

1. Run a line of 1/8" O.D. x 1/16" I.D. chromatography tubing from the solvent supply to the Vacuum Degasser.
2. See figure to the right for fittings configuration.
3. Connect tubing
   ⚠NOTE: Hand-tighten only.
4. Repeat steps 2 through 3 to connect additional lines to be degassed, plug any unused ports.



5. Prime each degassing membrane by pulling the solvent from the reservoir through the degassing system. This can be done by using the prime function of the LC or by connecting a syringe to the tubing or LC pump priming port and drawing air and/or mobile phase into the syringe until no air remains in the tubing, approximately 5 milliliters.

⚠ CAUTION: DO NOT prime the membranes by pushing solvent through the degassing systems. This technique can generate several hundred pounds of pressure which might rupture the membrane, even though the Systec AF™ membrane is quite rugged. The maximum recommended pressure on the membrane is 0.48 MPa (70 psig, 4.8 Bar).

⚠ CAUTION: Gel Permeation Applications (GPC) and normal phase Chromatography Applications

Altough not frequently used in GPC, hexafluoroisopropanol (HFIP) causes Systec AF to slightly swell and we recomend for such users our GPC model with hardened (stented) vacuum chambers (P/N: 0001-1020). We also recommend use of our hardened vacuum chambers for Normal Phase Chromatography Applications.